

TSS SENSOR

WATER QUALITY
MONITORING
SOLUTIONS

TL SERIES



FEATURES & BENEFITS

- Affordable real-time total suspended solids (TSS) monitoring
- Operator friendly, low maintenance design
- Bypass style sensor with multiple flow cell selections to meet application demands
- Quick and simple optical measurements
- Long-life LED light source
- Reagent free operation

REAL-TIME MONITORING SOLUTION

TSS Sensor

Real Tech's bypass TSS Sensor provides affordable real-time measurement of total suspended solids (TSS) in water or wastewater. Designed to meet the needs of a wide array of site-specific conditions, the TL series offers multiple flow cell designs and sensor path length selections for the desired measurement range.

Controllers and Accessories

Our innovative modular product platform ensures our clients gain the real-time water quality monitoring system that meets their specific demands and budget. With multiple controller and accessory options available such as automatic chemical cleaning systems that lower maintenance while improving system performance, Real Tech provides a total solution for all of your unique water quality monitoring needs.

Liquid Ai Compatible

Our Liquid Ai data services complement our real-time water quality monitoring systems. Calibration Health Monitoring ensures accuracy and reliability are maintained so our clients can have the utmost confidence in their results, while our Remote Monitoring platform enables access to data anywhere, anytime.

MEASUREMENT PRINCIPLE

Real Tech's TSS Sensor utilizes near infrared light for measurement to minimize or eliminate interference from other absorbing compounds. Benefiting from Real Tech's LED technology, accurate and stable measurements are obtained with minimal maintenance or operator intervention. Real Tech's innovative TSS sensor is advancing water and wastewater management.

MUNICIPAL WASTEWATER
INDUSTRIAL PROCESS WATER
INDUSTRIAL WASTEWATER

REALTECH
INC.



TSS SENSOR SPECIFICATIONS

CHARACTERISTIC	TECHNICAL DATA		
Model Series	1000 series	2000 series	4000 series
Path Length	0.5, 1, 2, 4, 10 mm	1, 2, 4, 8 mm	25, 50, 100, 150 mm
Parameters	Total Suspended Solids (TSS)		
Range	Depends on model selected. Refer to range chart.		
Units	mg/L, ppm		
Sampling Time	30 seconds		
Calibration	Factory calibrated. Field adjustment of calibration is possible.		
Cleaning	In-situ chemical cleaning makes cleaning quick and easy. Automatic chemical cleaning is optional.		
Self-Diagnostics	Detection and diagnosis of internal system fault		
Alarms	Dry contact terminals allow for operator configurable alarms for: high and low set points, low lamp output, leaks, system fault, etc.		
Humidity Control	Humidity sensor with large plug-in regenerating desiccant system		
Wavelength	Near infrared (NIR)		
Light Source	LED		
Flow Rate	500-1000 mL/min	300-1000 mL/min	
Pressure Rating	85 PSI maximum	20 PSI maximum	
Fluid Connections	3/8" OD tube push-in fittings	1/4" OD tube push-in fittings	
Wetted Materials	Kynar, FEP, Quartz, SS316L, Viton	Kynar, Polyethylene, Quartz, SS 316L, Viton	
Electrical/Comm.	From controller		
Ambient Temp.	0 to 45°C (32 to 113°F)		
Water Temp.	0 to 90°C (32 to 194°F) at 21°C (69.8°F) Ambient temperature		
Enclosure	NEMA 4X, wall mountable		
Weight	22 lb	24 lb	
Dimensions	17"H x 14.25"W x 7.5"D	15.82"H x 13.82"W x 9.00"D	
Warranty	2-year limited warranty (Extended care packages available)		

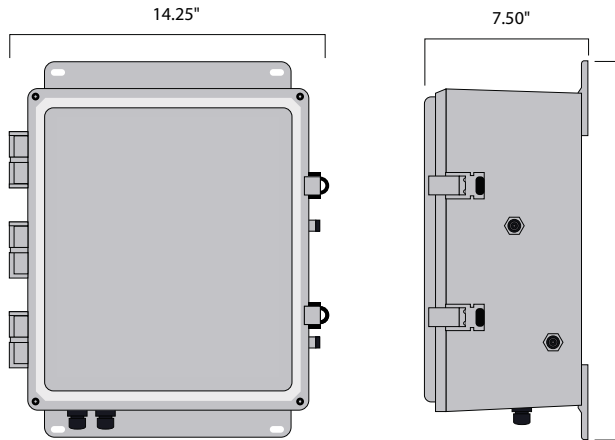
* Technical Specifications are subject to change without notice.

* Water temperature range based on material compatibility only. Contact Real Tech to verify application.

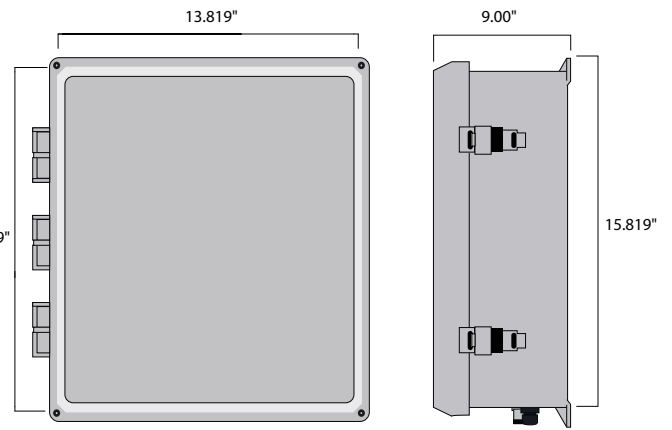
DIMENSIONS

The TSS Sensor is a bypass cabinet instrument installed directly on a wall, railing or system backboard. Sample is supplied to the sensor from either a pressurized source or from an open-channel using an accessory pumping system.

DIMENSIONS FOR 1000 & 2000 SERIES MODELS



DIMENSIONS FOR 4000 SERIES MODELS



SENSOR SELECTION

MODEL SERIES	DESCRIPTION
1000	Ideal for closed loop, high pressure or high solids wastewater monitoring applications
2000	Ideal for general water monitoring applications
4000	Ideal for high purity water monitoring applications

SENSOR MODELS & RANGE

Includes TSS sensor, flow cell, calibration bottle and dehumidifier. Controller and accessories sold separately.

MODEL#	PATH LENGTH	TSS (mg/L)
TL1005	0.5 mm	0 - 40,000
TL1010	1 mm	0 - 20,000
TL1020	2 mm	0 - 10,000
TL1040	4 mm	0 - 5,000
TL1100	10 mm	0 - 2,000
TL2010	1 mm	0 - 20,000
TL2020	2 mm	0 - 10,000
TL2040	4 mm	0 - 5,000
TL2080	8 mm	0 - 2,500
TL4025	25 mm	0 - 800
TL4050	50 mm	0 - 400
TL4100	100 mm	0 - 200
TL4150	150 mm	0 - 150

* Stated ranges are approximate, dependent on industry, site and application - contact Real Tech to confirm model selection

CONTROLLERS

Controllers include proprietary inputs for Real Tech sensors and accessories.

PRODUCT #	NAME	DESCRIPTION
S--229005	Real Controller Lite	Wall mounted controller with 4-line x 20-character back lit LCD display. Includes modbus RTU (RS485)
S-169000	Real Controller	Wall mounted controller with 4-line x 20-character back lit LCD display. Includes modbus RTU (RS485), 1 channel of 4-20 mA out and digital I/O module
S-11TPC	Real Controller Pro	Wall mounted controller with 12.1" colour LCD touch panel PC interface (PC inside cabinet model). Includes Modbus TCP
S-11TPCD	Real Controller Pro	Wall mounted controller with 12.1" colour LCD touch panel PC interface (PC external on door model). Includes Modbus TCP

ACCESSORIES

PRODUCT #	NAME	DESCRIPTION
UVT-078130	Real Clean System I	Automatic chemical cleaning system for use with 2000 series models
UVT-118010	Real Clean System II	Automatic chemical cleaning system for use with 4000 series models
UVT-079121	Pump Clean System I	Self-priming pump and automatic chemical cleaning for use with 2000 series models
UVT-129122	Pump Clean System II	Self-priming pump and automatic chemical cleaning for use with 4000 series models
S-229035	Pump Clean Pro System (pressurized)	For high solids sample water, automatic chemical cleaning and pumping system for up to 25' vertical lift or 100' horizontal in pressurized installation (no air compressor)
S-229036	Pump Clean Pro System (non-pressurized)	For high solids sample water, automatic chemical cleaning and pumping system for up to 25' vertical lift or 100' horizontal in non-pressurized/ open channel installation (no air compressor)
S-178121	Dual Feed II	Dual feed option includes Digital I/O module for use with controllers

BACKBOARDS & ASSEMBLY

Pre-wired and plumbed solution assembled and mounted on backboard with or without stand.

PRODUCT #	DESCRIPTION
S-169033	46" x 46" Industrial grade black plastic mounting backboard and assembly
S-179034	24" x 60" Industrial grade black plastic mounting backboard and assembly
S-179036	46" x 46" Industrial grade black plastic mounting backboard with stand and assembly
S-179035	24" x 60" Industrial grade black plastic mounting backboard with stand and assembly

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